

Data Layer Name	Annotation	Data Source
"Agriculture"	Agriculture land use	Chicago Metropolitan Agency for Planning (CMAP)
"Alluvial/Glacial Aquifer"	Extent of the alluvial and glacial aquifers north of the southern-most line of glaciation.	USGS and the National Atlas of the United States (2002).
"Archeologic Resource"	Areas believed to possess a high archaeological potential.	Illinois State Museum. Downloaded from Illinois Geospatial Clearinghouse [http://www.isgs.illinois.edu/nsdi/home/webdocs/browse.html]
"Bird Presence"	Areas with the presence of birds that are vulnerable or near threatened.	BirdLife International
"Carbon"	Carbon dioxide emissions (in grams) from rail operation.	NURail Team's estimate. Refer to full report for details.
"Carbon Monoxide"	Carbon Monoxide emissions (in grams) from rail operation.	NURail Team's estimate. Refer to full report for details.
"Commercial/Office"	Commercial or office land.	Chicago Metropolitan Agency for Planning (CMAP)
"County Boundary"	Geographical boundary of counties.	U.S. Census Bureau
"Critical Habitat"	Areas where final critical habitat exist for species listed as endangered or threatened.	US Fish and Wildlife Service.
"CTA Blue Line"	Blue line train branch by Chicago Transit Authority	City of Chicago Data Portal
"CTA Brown Line"	Brown line train branch by Chicago Transit Authority	City of Chicago Data Portal
"CTA Green Line"	Green line train branch by Chicago Transit Authority	City of Chicago Data Portal
"CTA Orange Line"	Orange line train branch by Chicago Transit Authority	City of Chicago Data Portal
"CTA Pink Line"	Pink line train branch by Chicago Transit Authority	City of Chicago Data Portal
"CTA Purple Line"	Purple line train branch by Chicago Transit Authority	City of Chicago Data Portal
"CTA Red Line"	Red line train branch by Chicago Transit Authority	City of Chicago Data Portal
"CTA Yellow Line"	Yellow line train branch by Chicago Transit Authority	City of Chicago Data Portal
"Derailment Accident Risk"	Derailment risk level estimated based on track class, mode of operation, track density, and tonnage.	NURail Team's estimate based on the model developed by Drs. Xiang Liu, Rapik Saat, Chris Barkan at UIUC. Input data are from FRA.

Data Layer Name	Annotation	Data Source
"Emission Hotspots"	Areas with potentially high level of emission rates (e.g., high volume of traffic). Priority areas for in-depth assessment.	NURail Team's estimate. Refer to full report for details.
"Employment Density"	Gross employment density (jobs/acre) on unprotected land at Census blockgroup level.	U.S. EPA SmartLocation Database.
"Flood Hazard"	Areas that will have a 1% (100-year) and .2% (500-year) or higher chance of being inundated by the flood event in any given year.	Illinois State Geological Survey (ISGS)
"Forest/Grassland"	Forest and grassland land.	Chicago Metropolitan Agency for Planning (CMAP)
"Grade Crossing"	Information about grade crossings (rail tracks intersecting roads) and surrounding environment, e.g., traffic counts, max speed, land use, operating company.	NURail team (spatial joined data provided by US DOT and FRA)
"Historical Site"	Buildings and districts in Chicago which are listed on the National Register of Historic Places (NRHP) or designated as National Historic Landmarks (NHL).	City of Chicago Data Portal
"Hydrocarbon"	Hydrocarbon emissions (in grams) from rail operation.	NURail Team's estimate. Refer to full report for details.
"Industrial"	Land for industrial uses	Chicago Metropolitan Agency for Planning (CMAP)
"Institutional"	Land for institutional uses	Chicago Metropolitan Agency for Planning (CMAP)
"Intermodal Terminal"	Different modes of DOT, supervised by RITA/BTS.	National Transportation Atlas Databases (NTAD) 2011
"Median Household Income"	Median Household Income at Census blockgroup level.	U.S. Census Bureau
"Metra Lines"	Northeast Illinois commuter rail system	City of Chicago Data Portal
"Natural Area"	"Area of land or water in public or private ownership that is formally dedicated pursuant to the terms of the law, to be maintained in its natural condition"	Illinois Natural History Survey
"NOx"	NO emissions (in grams) from rail operation.	NURail Team's estimate. Refer to full report for details.
"Open space"	Open spaces	Chicago Metropolitan Agency for Planning (CMAP)
"PM10"	Particular matter emissions (in grams) from rail operation.	NURail Team's estimate. Refer to full report for details.

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"Population Density"	Gross population density (people/acre) on unprotected land at Census blockgroup level.	EPA SmartLocation Database
"Public Transit Facility"	Transit station information.	Data originally provided by BTS and MPO, and compiled in the National Transportation Atlas Database.
"Railroad Speed"	Maximum allowed train speed.	National Transportation Atlas Database.
"Residential"	Residential land use	Chicago Metropolitan Agency for Planning (CMAP)
"Riparian Zone"	Extent of riparian areas; Classification of Wetlands and Deepwater Habitats.	U.S. Fish and Wildlife Service.
"Seismic Hazard"	Extent of seismic hazard; probability that ground motion will reach a certain level.	National Atlas, Department of the Interior, and U.S. Geological Survey.
"Shallowest Principal Aquifer"	Extent of Shallowest Principal Aquifers. Partially represent ground water withdrawal point.	USGS.
"Tornado Hazard"	Tornado touchdown points 1950-2008.	National Weather Service, Storm Prediction Center.
"Trail"	"Trails element and land-based greenways for the Northeastern Illinois Regional Greenways and Trails Plan - 2009 Update, adopted in October. An integral element of the Bikeway Information System."	Chicago Metropolitan Agency for Planning (CMAP)
"Transportation"	Land for transportation uses.	Chicago Metropolitan Agency for Planning (CMAP)
"Vacant"	Vacant lands	Chicago Metropolitan Agency for Planning (CMAP)
"Water"	Water	Chicago Metropolitan Agency for Planning (CMAP)
"Wetland"	Wetlands	Chicago Metropolitan Agency for Planning (CMAP)